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APPLICATION NO.	FII	ING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	ATTORNEY DOCKET NO. CONFIRMATION NO.	
10/721,941	11/25/2003		Franklin G. Ascarrunz	DN 1539	DN 1539 6897	
26483	7590	02/09/2005		EXAM	EXAMINER	
ANCEL W. 425 WEST M	,	CHOE, I	CHOE, HENRY			
SUITE 101	IOLDEKN		ART UNIT	PAPER NUMBER		
FORT COLLINS, CO 80521				2817		

DATE MAILED: 02/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)					
Office Action Summany	10/721,941	ASCARRUNZ ET AL.					
Office Action Summary	Examiner	Art Unit					
	Henry K. Choe	2817					
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	correspondence address					
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply - If NO period for reply is specified above, the maximum statutory period v - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a reply be ting within the statutory minimum of thirty (30) day will apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133).					
Status							
1) Responsive to communication(s) filed on 25 N	ovember 2003.						
·	·						
3) Since this application is in condition for allowar	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
closed in accordance with the practice under E	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims							
4)⊠ Claim(s) <u>1-14</u> is/are pending in the application.	Claim(s) <u>1-14</u> is/are pending in the application.						
4a) Of the above claim(s) is/are withdraw	4a) Of the above claim(s) is/are withdrawn from consideration.						
5)⊠ Claim(s) <u>10-12</u> is/are allowed.	Claim(s) <u>10-12</u> is/are allowed.						
6)⊠ Claim(s) <u>1,13 and 14</u> is/are rejected.	Claim(s) <u>1,13 and 14</u> is/are rejected.						
7) Claim(s) 2-9 is/are objected to.							
8) Claim(s) are subject to restriction and/or	Claim(s) are subject to restriction and/or election requirement.						
Application Papers							
9)☐ The specification is objected to by the Examiner.							
10)⊠ The drawing(s) filed on <u>25 November 2003</u> is/are: a)⊠ accepted or b)□ objected to by the Examiner.							
Applicant may not request that any objection to the	Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correct	Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) ☐ The oath or declaration is objected to by the Ex	aminer. Note the attached Office	Action or form PTO-152.					
Priority under 35 U.S.C. § 119							
12) ☐ Acknowledgment is made of a claim for foreigna) ☐ All b) ☐ Some * c) ☐ None of:1. ☐ Certified copies of the priority documents)-(d) or (f).					
2. Certified copies of the priority documents have been received in Application No							
3. Copies of the certified copies of the priority documents have been received in this National Stage							
application from the International Bureau (PCT Rule 17.2(a)).							
* See the attached detailed Office action for a list of the certified copies not received.							
Attachment(s)							
1) Notice of References Cited (PTO-892)	4) Interview Summary	(PTO-413)					
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) 	Paper No(s)/Mail Da 5) Notice of Informal P	ate Patent Application (PTO-152)					
Paper No(s)/Mail Date <u>11/25/2003</u> .	6) Other:						

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Sakai (Fig. 1).

Sakai (Fig. 1) discloses an amplifier circuit comprising a primary amplifier (6) having an input (input of 6) for receiving the input signal (a signal coming into an input terminal 1) and an output (output of 6), a first circuit means (4, 5, 7) which is connected to the input (input of 6) and output (output of 6), a second circuit means (8, 9, 12, 13, 14) which is connected to the first circuit means (4, 5, 7) and to the output (output of 6), a third circuit means (10, 11, 17, 18, 19) which is connected to the input (input of 6) and to the first circuit means (4, 5, 7) for mixing (11) the input signal (a signal coming into an input terminal 1) and amplifier generated noise (output signal of 6) to produce a first control signal (outputs of 19) and modulating (4 or 5) one of the input signal (a signal coming into an input terminal 1) and the output signal (a signal coming out of output of 6) in response to the first control signal (outputs of 19).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wilcox (Fig. 1) in view of Sakai (Fig. 1).

Wilcox (Fig. 1) discloses an amplifier circuit comprising a resonator (13), a phase modulator (11) which is connected to the resonator (13), and an amplifier circuit (10) which is connected to the resonator (13) and the phase modulator (11). As described above, Wilcox (Fig. 1) discloses all the limitations in the claim 13 except for that the internal structures of the amplifier circuit. Sakai (Fig. 1) discloses an amplifier circuit comprising a primary amplifier (6) having an input (input of 6) for receiving the input signal (a signal coming into an input terminal 1) and an output (output of 6), a first circuit means (4, 5, 7) which is connected to the input (input of 6) and output (output of 6), a second circuit means (8, 9, 12, 13. 14) which is connected to the first circuit means (4, 5, 7) and to the output (output of 6), a third circuit means (10, 11, 17, 18, 19) which is connected to the input (input of 6) and to the first circuit means (4, 5, 7) for mixing (11) the input signal (a signal coming into an input terminal 1) and amplifier generated noise (output signal of 6) to produce a first control signal (outputs of 19) and modulating (4 or 5) one of the input signal (a signal coming into an input terminal 1) and the output signal (a signal coming out of output of 6) in response to the first control signal (outputs of 19). It would have been obvious to substitute Sakai's amplifier in place of Wilcox's amplifier (10 of Wilcox) since Wilcox (Fig. 1) Art Unit: 2817

discloses a generic amplifier thereby suggesting that any equivalent amplifier would have been usable in Wilcox's reference.

Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Higuchi (Fig. 1) in view of Sakai (Fig. 1).

Higuchi (Fig. 1) discloses an amplifier circuit comprising first (11) and second (111) amplifier circuits, and a frequency mixer (13) which is connected to the first (11) and second (111) amplifier circuits. As described above, Higuchi (Fig. 1) discloses all the limitations in the claim 14 except for that the internal structures of the amplifier circuits. Sakai (Fig. 1) discloses an amplifier circuit comprising a primary amplifier (6) having an input (input of 6) for receiving the input signal (a signal coming into an input terminal 1) and an output (output of 6), a first circuit means (4, 5, 7) which is connected to the input (input of 6) and output (output of 6), a second circuit means (8, 9, 12, 13, 14) which is connected to the first circuit means (4, 5, 7) and to the output (output of 6), a third circuit means (10, 11, 17, 18, 19) which is connected to the input (input of 6) and to the first circuit means (4, 5, 7) for mixing (11) the input signal (a signal coming into an input terminal 1) and amplifier generated noise (output signal of 6) to produce a first control signal (outputs of 19) and modulating (4 or 5) one of the input signal (a signal coming into an input terminal 1) and the output signal (a signal coming out of output of 6) in response to the first control signal (outputs of 19). It would have been obvious to substitute Sakai's amplifier in place of Higuchi's amplifiers (11 and 111 of Higuchi) since

Higuchi (Fig. 1) discloses a generic amplifiers thereby suggesting that any equivalent amplifiers would have been usable in Higuchi's reference.

Allowable Subject Matter

Claims 2-9 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Reasons for Allowance

Claims 10-12 are allowed.

The following is a statement of reasons for the indication of allowable subject matter:

Regarding claim 10, the closest prior art of record, Sakai (Fig. 1) does not disclose the following limitations: a third circuit having a sixth modulator with the variable delay and variable attenuator.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Patent numbers (6,172,560; 6,456,160) are the feedforward amplifiers.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Henry Choe whose telephone number is (571) 272-

1760.

HENRY CHOE
PRIMARY EXAMINER

#977